

## **REMARKS**

### **Status of the claims:**

Claims 1, 4, 9-11, 14, and 16-29 are pending in the application. New claims 27-29 have been added. Claims 1, 3, 4, 10, 11, 13, 14, 17, 19-21, 23, and 26 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by United States Patent No. 6,280,126 to Slocum et al. (hereinafter “Slocum”). Claims 1, 7, 9, 11, 16-18, and 22 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by United States Patent No. 5,143,493 to Najima et al. (hereinafter “Najima”). Claims 1, 17, 24, and 25 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by World Intellectual Property Organization International Publication Number WO 01/98008 to Karlsson et al. (hereinafter “Karlsson”).

Applicants have added new claims 27-29. Support for new claims can be found in paragraphs [0026], [0034], [0041], and [0045] of the specification as well as elsewhere throughout the specification, the Figures, and original claims.

Applicants have amended claims 1, 11, 17, and 26. Claim 1 has been amended to incorporate the limitations of previously presented claims 3 and 7 along with the addition of “damping” to the preamble. Claim 11 has been amended to include the limitations as recited in previously presented claim 13. Also, claims 11, 17, and 26 have been amended to provide that the structured surface directly contacts the receiving surface. Support for these amendments can be found in paragraphs [0026], [0034], [0041], and [0045] of the specification as well as elsewhere throughout the specification, Figures, and original claims.

Applicants respectfully reiterate their displeasure in the reintroduction of previously considered references and previously considered rejections that were resolved almost 2 years ago.

Applicants respectfully request consideration of the application in view of the foregoing amendments and the following remarks.

**Rejections under 35 U.S.C. § 102**

Claims 1, 3, 4, 10, 11, 13, 14, 17, 19-21, 23, and 26 and Slocum

The rejection of claims 1, 3, 4, 10, 11, 13, 14, 17, 19-21, 23, and 26 as allegedly being anticipated under 35 U.S.C. § 102(b) by Slocum is traversed.

Applicants submit that “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Examiner has failed to disclose each and every element set forth in the claims; therefore as a matter of law, the present claims are not anticipated under § 102(b).

As amended claim 1 includes the limitation wherein the depression are substantially hemispherical.<sup>1</sup> Slocum describes a series of grooves that are present on its structured surface. Additionally, in the Office Action dated August 31, 2007, the Examiner has effectively conceded that an apparatus comprising a structured surface having substantially hemispherical depressions is not anticipated by Slocum by not entering a rejection of claim 7 by Slocum. For at least this reason, the present rejection of claim 1 should be withdrawn.

Claims 11, 17, and 26, as amended, each include the limitation wherein the first surface (claim 11) or structured surface (claims 17 and 26) directly contacts the receiving surface. Slocum does not describe an apparatus wherein the first surface or structured surface directly contacts the receiving surface. In contrast, Slocum describes an apparatus having an annular gap

---

<sup>1</sup> This limitation regarding substantially hemispherical depressions was included in previously presented claim 7. Claim 7 has been canceled and incorporated into independent claim 1.

23 between the first and second element.<sup>2</sup> The apparatus of Slocum describes a fluid filled gap between the two elements in order to dampen: “FIGS 1 and 2 show a preferred damped tool holding system constructed in accordance with the invention, and which uses *hydrostatic bearings as the damping structure*.” (emphasis added).<sup>3</sup> The apparatus of Slocum provides a fluid damping annulus film that is supported by a coaxial hydrostatic damping bearing surface 23.<sup>4</sup> Slocum consistently describes its damping structure as a hydrostatic bearing, sealed passive fluid film annulus, viscoelastic or other lossy material annulus<sup>5</sup>—all of which prevent the structured surface from contacting the receiving surface.

Further, Slocum does not teach a structured surface comprising a plurality of depressions. The Examiner has relied upon a dictionary definition of the term “depression” in order to define the term “depression” to include “grooves”. However, Applicants respectfully assert that the reliance upon the external source is improper in the present case. An applicant is entitled to be its own lexicographer. The specification clearly provides that depressions and grooves are two distinct terms. Applicants direct the Examiner’s attention to paragraphs [0026], [0029], [0031], and [0033] where grooves and depressions are listed as separate embodiments. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed Cir. 2005) (stating that during examination claims are given their broadest reasonable construction “in light of the specification as it would be interpreted by one of ordinary skill in the art” (citing *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.2d 1359, 1364, 70 USPQ 1827 (Fed. Cir. 2004))).

For at least these reasons, Applicants assert that independent claims 1, 11, 17, and 26 are not anticipated by Slocum. Further as claims 4, 10, 14, 19-21, and 23 depend from and further

---

<sup>2</sup> See Slocum, col. 3, lines 60-61.

<sup>3</sup> See Slocum, col. 3, lines 51-53.

<sup>4</sup> See Slocum, col. 3, lines 63-65

<sup>5</sup> See Slocum, col. 2, lines 28-31.

limit the independent claims or an intervening claim, claims 4, 10, 14, 19-21, and 23 are also not anticipated by Slocum. Therefore, Applicants respectfully submit that the present rejection be withdrawn, and claims 1, 3, 4, 10, 11, 13, 14, 17, 19-21, 23, and 26 be indicated as allowable.

Claims 1, 7, 9, 11, 16-18, and 22 and Najima

The rejection of claims 1, 7, 9, 11, 16-18, and 22 as allegedly being anticipated under 35 U.S.C. § 102(b) by Najima is traversed.

The Examiner has failed to disclose each and every element set forth in the claims; therefore as a matter of law, the present claims are not anticipated under § 102(b).

As amended claim 1 includes the limitation that the receiving surface is substantially uniform.<sup>6</sup> First, in the Office Action dated August 31, 2007, the Examiner has effectively conceded that an apparatus comprising a receiving surface that is substantially uniform is not anticipated by Najima by not entering a rejection of claim 3. For at least this reason, the present rejection of claim 1 should be withdrawn.

Additionally, Najima describes a vibrating cutting tool that pertains to constrain vibrations in one direction, where the vibrations have a uniform amplitude at the cutter edge.<sup>7</sup> The apparatus of Najima does not provide an apparatus comprising a structured surface 4 comprising a plurality of depressions and the structured surface 4 being in direct contact with the receiving surface 2. Instead, Najima describes an apparatus with a number of springs and steel balls in between the structured surface and receiving surface in order to reduce vibrations. Najima does not describe a damping apparatus where the structured surface directly contacts the receiving surface.

---

<sup>6</sup> This limitation regarding substantially hemispherical depressions was included in previously presented claim 3. Claim 3 has been canceled and incorporated into independent claim 1.

<sup>7</sup> See Najima, col. 1, lines 49-62.

For at least these reasons, Applicants assert that independent claims 1, 11, and 17 are not anticipated by Najima. Further as claims 9, 16, and 18 depend from and further limit the independent claims or an intervening claim, claims 9, 16, 18, and 22 are also not anticipated by Najima. Therefore, Applicants respectfully submit that the present rejection be withdrawn, and claims 1, 9, 11, 16-18, and 22 be indicated as allowable.

Claims 1, 17, 24, and 25 and Karlsson

The rejection of claims 1, 17, 24, and 25 as allegedly being anticipated under 35 U.S.C. § 102(b) by Karlsson is traversed.

The Examiner has failed to disclose each and every element set forth in the claims; therefore as a matter of law, the present claims are not anticipated under § 102(b).

Karlsson describes a drilling tool with axially extended chip channels with a damping unit within the channel. First, for reasons consistent with those as discussed in connection with Slocum, the channels and grooves described in Karlsson do not anticipate the depressions of the presently claimed invention. Applicants submit that 14/15 of Slocum refer to recesses or grooves for chip release, not depressions. On page 1, line 9, Karlsson describes the one or more recesses serving as “grooves for chip releases.” Applicants respectfully direct the Examiner’s attention to paragraphs [0026], [0029], [0031], and [0033] where grooves, channels, and depressions are listed as separate embodiments. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed Cir. 2005).

Applicants request that all the rejections be withdrawn as the cited references do not disclose each and every element of the present claims. Applicants believe that the present claims are in allowable form, and Applicants request a notice of allowance be immediately entered.

### **Dependent Claims**

In responding to the claim rejections above, Applicants submit that the dependent claims are patentable based on their dependency from independent claims, which Applicants argue are patentable. Thus, in many instances, Applicants have not provided separate remarks specifically directed to the Examiner's grounds for rejecting the dependent claims. Applicants' failure to comment on or otherwise traverse the Examiner's rejection of the dependent claims should not be viewed as agreement, on the part of the Applicants, with the Examiner's grounds for rejection.

### **New Claims 27-29**

New claims 27-29 have been entered into the present application. Support for the new claims can be found generally at paragraphs [0026], [0034], [0041], and [0045] in the specification as well as elsewhere in the specification and original claims. Applicants respectfully submit that the cited prior art does not render new claims 27-29 anticipated or obvious. Accordingly, Applicants respectfully request that claims 27-29 also be allowed.

### CONCLUSION

Each of the claims remaining in the application is in condition for immediate allowance.

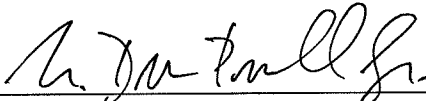
A passage of the instant invention to allowance is earnestly solicited.

Applicants believe that no additional fee, other than the fee submitted in connection with the Request for Continued Examination, is necessary, however, should a fee be deemed to be necessary, the Commissioner is hereby authorized to charge any fees required by this action or any future action to Deposit Account No. 16-1435.

Should the Examiner have any questions relating to the instant application, the Examiner is invited to telephone Dean Powell at (336) 607-7347 or Ben Schroeder at (336) 607-7486 (Registration No. 50,990) to discuss any issues.

Respectfully submitted,

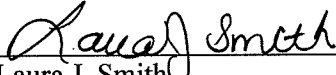
Date: 10/31/07

  
N. Dean Powell, Jr. (Reg. No. 58,909)

KILPATRICK STOCKTON LLP  
1001 West Fourth Street  
Winston-Salem, North Carolina 27101-2400

**Certificate of Electronic Filing**

I hereby certify that this correspondence is being electronically filed with The United States Patent Office via EFS Web on October 31, 2007

  
Laura J. Smith